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1. A vulcanizing mold for pneumatic tires, comprising: upper and lower base plates;

upper and lower sidewall mold members for forming tire sidewall portions, said upper and lower sidewall mold members being attached to said upper and lower base plates, respectively;

upper and lower tread mold members for forming a tire tread portion, said upper and lower tread mold members being attached to said upper and lower base plates, respectively;

said upper and lower tread mold members being constituted of upper segments and lower segments, respectively, said upper and lower segments being displaceable only radially relative to said upper and lower sidewall mold members, respectively; and

a single cam ring which is adapted to be displaced independently of approaching displacements of said sidewall mold members toward each other, to thereby simultaneously displace all of said upper and lower segments radially inwards while said upper and lower segments are in abutment with each other.

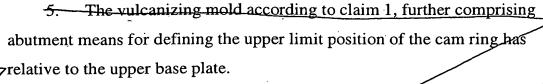
- 2. The vulcanizing mold according to claim 1, wherein said upper and lower segments are directly or indirectly engaged with said upper and lower base plates, respectively, such that they are radially displaceable relative to respective one of said sidewall mold members.
- 3. The vulcanizing mold according to claim 1, wherein said cam ring is engageable with both of said upper and lower segments.
- 4. The vulcanizing mold according to claim 1, wherein said upper segments are always in engagement with said cam ring on radially inner side thereof.

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6. A vulcanizing method for pneumatic tires with a vulcanizing mold which comprises: (i) upper and lower base plates; (ii) upper and lower sidewall mold members attached to said upper and lower base plates, respectively; and (iii) upper and lower tread mold members attached to said upper and lower base plates, respectively; (iv) said upper and lower tread mold members being constituted of upper segments and lower segments, respectively, which can be radially expanded and contracted relative to the upper and lower sidewall mold members, respectively; said method comprising the steps of:

displacing said upper and lower sidewall mold members toward each other so that said upper and lower segments are brought into abutment with each other; and

simultaneously displacing all of said segments radially inwards and relative to said upper and lower sidewall mold members, with said upper segments in abutment with said lower segments.

7. The vulcanizing method-according to claim 6, wherein a single cam
20 ring is operated to cause said simultaneous displacement of the segments.